Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A communication apparatus comprising:

a ~~transmission modulator~~ modulation part for impulse-modulating transmission data and generating a plurality of subcarriers modulation signals, at least two of the subcarriers including the same data;

a transmission part for amplifying the plurality of subcarriers modulation signals and generating a plurality of subcarrier-transmission signals;

a filter section for outputting a plurality of transmission signals, the transmission signals being band-limited of the plurality of subcarrier-transmission signals; and

~~a carrier control section for controlling the subcarriers for use in communication depending upon information amount, significance and communication propagation condition; and~~

an antenna section for multiplexing and radiating the plurality of transmission~~subcarrier signals~~.

2. (Currently Amended) A communication apparatus according to ~~claim 1~~claim 35, further comprising a reception ~~modulator~~ modulation part for detecting reception data and examining a reception power on each subcarrier,

to notify to the subcarrier control section a permission/non-permission to use the subcarrier, depending upon the reception power examined by the reception ~~demodulator~~demodulation part.

3. (Original) A communication apparatus according to claim 2, wherein the carrier control section causes hopping two or more of the subcarriers.

4. (Original) A communication apparatus according to claim 2, wherein the carrier control section causes spread on two or more of the subcarriers.

5. (Currently Amended) A communication apparatus according to ~~claim 2~~claim 1, wherein the ~~transmission modulator~~ modulation part changes an on-frequency allocation of the subcarriers according to communication condition.

6. (Currently Amended) A communication apparatus according to ~~claim 2~~claim 1, wherein the ~~transmission modulator~~modulation part assigns a narrower band to the subcarrier having a lower center frequency and a broader band to the subcarrier having a higher center frequency.

7. (Currently Amended) A communication apparatus according to ~~claim 2~~claim 1, further comprising a channel control section for selecting and controlling the subcarrier for use on each channel,

the channel control section performing communication over two or more channels with different ones of the subcarriers.

8. (Original) A communication apparatus according to claim 7, wherein the channel control section performs communication over two or more channels with a combination of different ones of the subcarriers.

9. (Currently Amended) A communication apparatus according to ~~claim 7~~claim 35, wherein carrier control ~~section~~ part performs communication of control information by at least one of the subcarriers.

10. (Currently Amended) A communication apparatus according to claim 9, wherein the ~~transmission modulator~~ modulation section multiplexes together the pieces of control information on ~~two~~ three or more channels by use of any one of time division ~~multiplexing~~ multiplex and code division ~~multiplexing~~multiplex, in at least one subcarrier of two or more of the subcarriers.

11. (Currently Amended) A communication apparatus according to claim 2, wherein the ~~transmission modulator~~modulation section carries out frequency division duplex by use of two or more of the subcarriers.

12. (Currently Amended) A communication apparatus according to claim 9, wherein the ~~transmission modulator~~modulation section carries out frequency division duplex by use of three or more of the subcarriers.

13. (Currently Amended) A communication apparatus according to claim 9, wherein the subcarrier with which the ~~transmission modulator~~ modulation part is to communicate the control information has a center frequency lower than a center frequency of the other subcarrier.

14. (Currently Amended) A communication apparatus according to claim 9, wherein the subcarrier with which the ~~transmission modulator~~modulation part is to communicate the control information has a band narrower than a band of the other subcarrier.

15. (Currently Amended) A communication apparatus according to claim 7, wherein the ~~transmission modulator~~modulation part divides one symbol into two or more of the subcarriers, thereby multiplexing two or more channels.

16. (Currently Amended) A communication apparatus according to claim 15, wherein the ~~transmission modulator~~modulation part causes frequency hopping in one symbol by use of two or more of the subcarriers, to thereby multiplexing two or more channels.

17. (Currently Amended) A communication apparatus according to claim 15, wherein the ~~transmission modulator~~modulation part causes ~~encoding~~ encoded spread of one symbol onto two or more of the subcarriers, to thereby multiplexing two or more channels.

18. (Currently Amended) A communication apparatus according to claim 15, wherein the ~~transmission modulator~~modulation part causes spread of one symbol onto two or more of the subcarriers and two or more chips, thereby multiplexing two or more channels.

19. (Currently Amended) A communication apparatus according to ~~claim 2~~claim 1, wherein the antenna ~~section~~ part comprises a plurality of antenna elements.

20. (Currently Amended) A communication apparatus according to ~~claim 2~~claim 1, wherein the antenna ~~section~~ part has a frequency characteristic of a multi-band characteristic.

21. (Original) A communication apparatus according to claim 19, wherein the antenna elements are different in center frequency of frequency characteristic.

22. (Original) A communication apparatus according to claim 21, wherein the antenna elements have band characteristics not to overlap on a frequency axis.

23. (Currently Amended) A communication apparatus according to claim 2, wherein the antenna ~~section~~ part receives radio wave on a subcarrier-by-subcarrier basis and outputs the subcarrier signal to the reception ~~modulator~~modulation part.

24. (Original) A communication apparatus according to claim 19, wherein the antenna elements have frequency characteristics corresponding to the subcarriers and radiate subcarrier transmission signal as a radio wave.

25. (Currently Amended) A communication apparatus according to claim 2, wherein the reception ~~demodulator~~ demodulation part has a compensation ~~section~~ part for detecting a characteristic of a subcarrier-based signal ~~sequence~~ sub-system ~~of each subcarrier~~ from a known signal received from a communication partner and compensating for the characteristic of the signal sub-system.

26. (Currently Amended) A communication apparatus according to claim 25, wherein the characteristic of the signal sub-system is a frequency characteristic.

27. (Currently Amended) A communication apparatus according to claim 25, wherein the characteristic of the signal sub-system is a time response characteristic, the compensation ~~sectioncompensating~~ part compensating for the time response characteristic by a correlation signal of a correlator.

28. (Currently Amended) A communication apparatus according to claim 2, wherein the reception ~~demodulator~~ demodulation part comprises

a spread code storing ~~section~~ part for storing a spread code and extracting a spread code corresponding to the subcarrier, and

a dispread ~~section~~ part for making a convolution operation of the subcarrier signal and the spread code extracted at the spread code storing section.

29. (Currently Amended) A communication apparatus according to ~~claim 2~~claim 1, wherein the transmission ~~demodulator~~ demodulation part comprises

a spread code storing ~~section~~ part for storing a spread code and extracting a spread code corresponding to the subcarrier, and

a spread ~~section~~ part for making a direct spread onto the subcarrier from the modulation signal divided into the subcarriers and the spread code extracted at the spread code storing ~~section~~part.

30. (Currently Amended) A communication apparatus according to claim 2, wherein the reception ~~demodulator~~ demodulation part comprises

a switch ~~section~~ part for switching over by frequency hopping on the subcarrier,

the carrier control ~~section~~ part carrying out the control in the switch ~~section~~part.

31. (Currently Amended) A communication apparatus according to ~~claim 2~~claim 1, wherein the ~~transmission demodulator~~ demodulation part comprises

a switch ~~section~~ part for switching over by frequency hopping on the subcarrier,

the carrier control ~~section~~ part carrying out the control in the switch section.

32. (Currently Amended) A communication method for impulse modulation communication with using a plurality of subcarriers, at least two of the subcarriers including the same data, the communication method comprising:

a step of measuring a reception power on every subcarrier in a non-signal state, in an initial state prior to starting a communication; and

a step of determining the reception power measured and selecting the subcarrier usable in communication.

33. (Original) A communication method according to claim 32, wherein the determination is to use, in a later communication, the subcarrier having the reception power equal to or smaller than a predetermined value.

34. (Original) A communication method according to claim 33, further comprising

a step of measuring a reception power on every subcarrier of a received known signal at a start of communication; and

a step of selecting the subcarrier having the measured reception power equal to or greater than a predetermined value, as a subcarrier usable in communication.

35. (New) A communication apparatus according to claim 1, further comprising a carrier control part for controlling the subcarriers for use in communication depending upon information amount, significance and communication propagation condition.